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Logistics Integration in ASEAN Faces Serious Challenges

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EXECUTIVE SUMMARY

- ASEAN prioritised logistics integration by endorsing the *Roadmap for the Integration of Logistics* in 2008, which includes liberalization and facilitation measures. As of 2016, much still need to be done to enhance logistics integration in ASEAN.
- The slow progress is due to three main challenges encountered in integrating logistics, namely differences among ASEAN member countries in terms of their respective institutions, infrastructure and implementation capacities.
- Key policy recommendations for furthering logistics integration include:
 1. Data collection based on harmonised measures in order to monitor and ascertain the impact of further liberalization and facilitation measures;
 2. Identifying viable infrastructure projects and exploring financing options and models for improving infrastructure quality;
 3. Improving institutions of governance as identified in the ASEAN Economic Community (AEC) 2025 vision, and;
 4. Investing in financial and human resources to build capacity within each member country, and coordinating their use.

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INTRODUCTION

As the ASEAN member countries deepen their economic integration process from ASEAN Economic Community (AEC) 2015 to AEC 2025, one key factor to consider is logistics integration. It is logistics that facilitates the movement of goods and services within and across borders, from producers to producers/consumers. Seamless logistics enhances supply-chain movements, reduces trade costs and smoothens trade across countries. In recognition of its importance, ASEAN has identified logistics as one of its priority integration sectors in the 2015 Blueprint.

It also developed a Connectivity Masterplan and a Strategic Transport Plan in 2010 and 2011 respectively which cover different dimensions of logistics. However, since logistics cut across multiple sectors in terms of the types of services needed and the four different modes of transportation (road, rail, air and sea), achieving logistics integration is a difficult and a long-term undertaking.

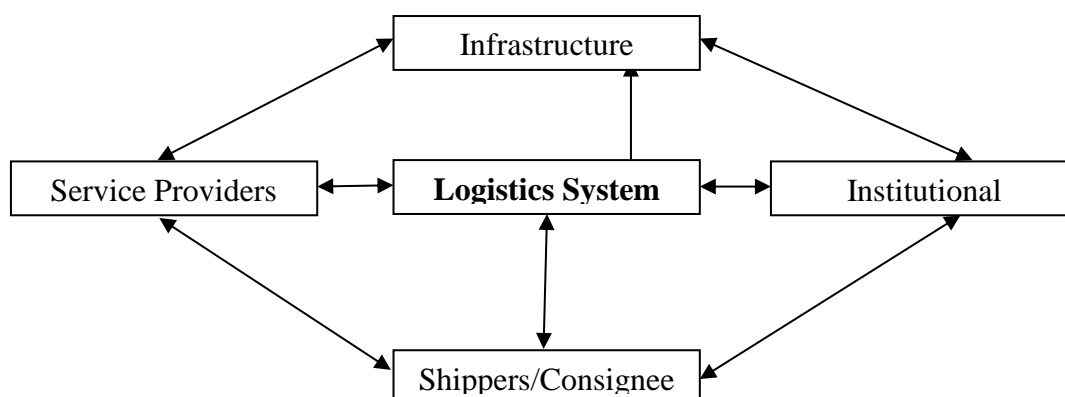
This paper examines the state of logistics integration in ASEAN – its promises and progress - and discusses the key challenges that the sector faces. It concludes with some policy recommendations.

DEFINING LOGISTICS AND ITS ECONOMIC SIGNIFICANCE

The definition of logistics has evolved from meaning the mere handling and transport of materials to include activities that facilitate transactions in production and trade such as warehousing, storage, communication, and infrastructure. Furthermore, to function well, these components have to be supported by appropriate institutions. In ASEAN, logistics is thus understood to be composed of a) shippers, traders and consignees; b) public and private service providers; c) regional and national institutions, policies and rules and d) transport and communication infrastructure¹ (Figure 1).

¹ See Banomyong (2008), “Logistics Development in the North-South Economic Corridor of the Greater Mekong Sub-region”, *Journal of GMS Development Studies*, Vol 4, pp. 43-57, Asian Development Bank.

Figure 1: Components of Logistics System



Source: Banomyong (2008)

For regional connectivity, several state agencies, including customs, play a crucial role in raising efficiency and lowering costs.² Studies have shown that efficient logistics strengthens export competitiveness and improves a country's capability to liberalise its market.³

It has been estimated that a 20 per cent faster clearance of imports and exports can increase ASEAN's cumulative GDP growth rate from 0.2 to 1.5 per cent; and a 10 per cent improvement in customs clearance and logistics competencies can raise intra-ASEAN trade by 15 per cent. In addition, a 10 per cent improvement in domestic competition and government efficiency can lead to a 24 per cent growth in intra-ASEAN trade.⁴

ROADMAP FOR LOGISTICS INTEGRATION (RILS)

The logistics sector was declared a priority sector in 2004 and the ASEAN Secretariat subsequently commissioned a study to develop a roadmap for its development in 2006.⁵ This study used survey findings to identify the core strengths and weaknesses in this sector. The

² See Banomyong, Cook and Kent (2008), "Formulating Regional Logistics Development Policy: The Case of ASEAN", *International Journal of Logistics: Research and Application*, Vol 11, No. 5, pp. 359-379.

³ See Wilson, Mann and Otsuki (2003) 'Trade Facilitation and Economic Development: A New Approach to Quantifying the Impact', *The World Bank Economic Review*: 17(3): 367-389, The World Bank. See also Tongzon (2011), "Liberalisation of Logistics Services: The Case of ASEAN", *International Journal of Logistics: Research and Applications*: 14 (1): 11-34

⁴ See Milo (2015), "Services Liberalisation in AEC: A Focus on Logistics Sector", presentation at Regional Conference/ Forum for Freight Forwarders, United Nation ESCAP Bangkok, 25 June 2015 (http://www.unescap.org/sites/default/files/ERIA_FFForum_BKK2015.pdf; accessed on 4 September 2016)

⁵ See Banomyong, Cook and Kent (2008), "Formulating regional logistics development policy: the case of ASEAN", *International Journal of Logistics: Research and Applications*: 11(5): 359-379.

survey findings and stakeholder consultations were then used to formulate the roadmap for logistics integration, which was later endorsed in 2008.

Content of RILS

The objectives of the RILS are two-fold: (i) Help to create an ASEAN single market by 2015 by strengthening ASEAN economic integration through liberalisation and facilitation measures in the area of logistics services; and (ii) Create an integrated ASEAN logistics environment to enhance the competitiveness of an ASEAN production base.⁶ The liberalization and facilitation measures in the Roadmap and their respective implementation mechanisms are summarized in Table 1. The liberalization measures are to be implemented through AFAS, while the facilitation measures are to be taken mainly through the ASEAN Strategic Transport Plan (2011-2015) since transportation is an important component of logistics.

Table 1. Roadmap for the Integration of Logistics (RILS)

	Components	Implementation Mechanism
1.	Liberalization of nine logistics services sectors	<ul style="list-style-type: none"> • ASEAN Framework Agreement on Services (AFAS)
2.	Four key facilitation measures: <ul style="list-style-type: none"> • Enhancing competitiveness of ASEAN logistics service providers through trade (including documentation simplification; • Expanding capability of ASEAN logistics service providers; • Human resource development; • Enhancing multi-modal transport infrastructure and investment 	<ul style="list-style-type: none"> • Measures are implemented and monitored through the action plans of ASEAN sectoral bodies in Services, Transport and Trade/Customs; • Measures have been aligned with the ASEAN Strategic Transport Plan (2011-2015).⁷

Source: Tham (2016)⁸

The aim in the liberalization measures for logistics is therefore aligned with services liberalization in AFAS that targeted the completion of negotiations for 10 packages by 2015 with stipulated targets over the different modes of delivery, as shown in Table 2.

⁶ The Roadmap can be downloaded from <http://www.asean.org/storage/images/archive/20883.pdf> , accessed 1 September 2016.

⁷ See <http://asean.org/wp-content/uploads/images/archive/documents/BAP%202011-2015.pdf>, accessed 1 September 2016. The Brunei Action Plan charts the course for transportation development in ASEAN in land, rail, air and sea. Since transportation is a big component in logistics, the facilitation measures in RILS is aligned with the facilitation measures in the Brunei Action Plan.

⁸ See Tham (2016), “Examining ASEAN’s Logistics Sector Integration”, Power-point presentation at *ASEAN Roundtable 2016*, ISEAS-Yusof Ishak Institute, Singapore.

Table 2. Liberalization Targets in Logistics

Modes	Description	Targets for Logistics by AFAS 10 in 2015
1	Cross border supply	None
2	Consumption abroad	None
3	Commercial presence	To allow foreign equity of up to 70 per cent; with no limitations on national treatment
4	Movement of natural persons	Superseded by ASEAN Agreement on the Movement of Natural Persons, 2011

Source: Tham (2016)

Unlike the liberalization measures, the facilitation measures are numerous, (33 in total), wide ranging and with open-ended time-lines for 26 of them.⁹ The plan thus envisages liberalization to move ahead of the facilitation measures which are deemed to be more long-term in nature.

Status of Implementation

Negotiations for liberalization proved difficult as the protocol for the implementation of ninth package of AFAS (AFAS 9) has just been signed on the 27 November 2015 (Table 2). The target date for signing the tenth package (AFAS 10) is 2017. The main problem encountered in liberalization measures is in Mode 3, which is also the most important mode of trade in services. The target of 70 per cent foreign equity has not been achieved for some countries due to internal problems, such as in the case of Malaysia, where existing concession agreements in maritime cargo handling services allow foreign equity to be limited to only 49 per cent only. More importantly the target of 70 per cent of foreign equity may not be achieved even with AFAS 10 due to three main reasons: First, the Roadmap's statement that "Member countries shall endeavour to achieve substantial liberalization of logistics services..." does not carry the same weight as a binding commitment. Second, services liberalization provides 15 per cent flexibility for sub-sectors that may be of national sensitivity and/or that may not comply with agreed parameters. Finally, the ASEAN Minus X Formula provides additional flexibility in terms of offers made for liberalization.

Likewise, the loose arrangements for logistics facilitation in terms of time lines and the non-committal language used in the Roadmap inevitably mean that many measures remain as work in progress. Take for example some of the transport facilitation goals stated in ASEAN Strategic Transport Plan (2011-2015): the nine protocols in the ASEAN Framework Agreement on the Facilitation of Goods in Transit (AFAFGIT) are still in varying stages of ratification. Cambodia, Lao PDR, the Philippines, Thailand and Vietnam have ratified the ASEAN Framework Agreement on the Facilitation of Inter-State Transport (AFAFIST),

⁹ For example, the time-line for strengthening intra-ASEAN maritime and shipping transport services has "on-going" in its time line with no binding deadline, while the time line for the transportation facilitation agreements merely states that it is to begin in 2008 and there are no binding deadlines as well.

while Cambodia, Myanmar, Lao PDR, the Philippines, Thailand and Vietnam have ratified the ASEAN Framework Agreement on Multimodal Transport (AFAMIT).¹⁰ As noted by the ASEAN Secretariat (2015), some countries have not ratified some of the agreements because the necessary domestic laws have not yet been enacted to support ratification, as for example in the case of multi-modal transport in Malaysia. Operationalizing the agreements is therefore not possible as yet.

Challenges for RILS

The key challenges for logistics sector integration can be attributed to differences in the ASEAN member countries' stage of development. A more matured logistics services industry can be found in the more developed member countries that have relatively good institutions, adequate infrastructure and better implementation capabilities. For example, while the respective logistics services industry in Singapore and Malaysia is relatively well-developed, including the ICT sector, the same cannot be said for Myanmar, Laos and Cambodia. This translates into differences in priorities in member countries in terms of their respective commitment to the liberalization and facilitation measures. In certain sectors like shipping transport services, cabotage policies that restrict internal point-to-point maritime transport services to domestic vessels and the imposition of majority government ownership rules are still used. Tables 3, 4 and Figure 2 illustrate the vast disparities in terms of institutions, and hard and soft infrastructures across the ten ASEAN member countries.¹¹

Institutions

Institutions are defined as the rules of the game in a society or more formally as the humanly devised constraints that shape human interactions.¹² The quality of institutions in a country at the macro level is usually proxied by the four main indicators shown in Table 3, namely political stability, corruption, rule of law and the ease of doing business. Singapore is the best performer in all the proxies used for measuring institutional quality, while Cambodia, Laos and Myanmar are the worst. This leads to significant differences in each member country's approach to logistics integration as the liberalisation and facilitation measures can require changes in the rules and regulations of a country.

¹⁰ See ASEAN Secretariat 2015a, *Kuala Lumpur Transport Strategic Plan (ASEAN Transport Strategic Plan) 2016-2025*.

http://www.asean.org/storage/2016/01/11/publication/KUALA_LUMPUR_TRANSPORT_STRATEGIC_PLAN.pdf, accessed 1 September 2016.

¹¹ Tables 3, 4 and 5 are based on an on-going research on "Services Liberalization in ASEAN: FDI Liberalization in ASEAN's Logistics Sector", that is currently undertaken by ISEAS-Yusof Ishak Institute, with the perspective's authors as project coordinators.

¹² North, D. 1990. *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press.

Table 3. Comparative Ranking of ASEAN countries for political stability, perceived level of corruption, and rule of law

	Political Stability and Absence of Violence/Terrorism: Percentile Rank (2014)	Transparency International Corruption Perceptions Rank (2015)	Rule of Law: Percentile Rank (2014)	World Bank's Ease of Doing Business Rank (2015)
Brunei	95.1	n.a.	70.2	84
Cambodia	44.7	150	17.3	127
Indonesia	31.1	88	41.8	109
Laos	61.2	139	26.9	134
Malaysia	58.7	54	75.0	18
Myanmar	11.7	147	8.7	167
Philippines	22.8	95	43.3	103
Singapore	92.2	8	95.2	1
Thailand	16.5	76	51.4	49
Vietnam	46.1	112	44.7	90

Note: n.a.: not available

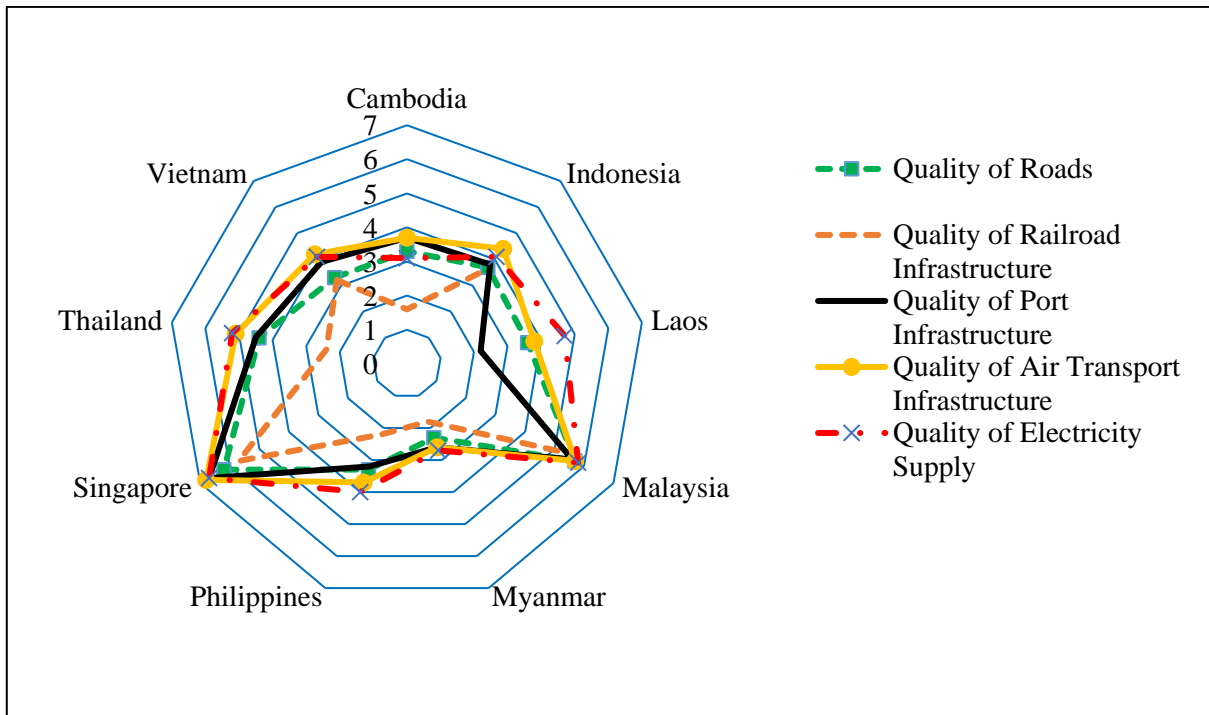
Source: World Governance Indicators, World Bank (for data on Political Stability and Rule of Law); World Bank, Doing Business 2016; Transparency International (for the Corruption Perception Index).

Infrastructure, including Human Capital

Figure 2 presents a comprehensive summary of the infrastructure competitiveness of ASEAN countries, published by the World Economic Forum. Apart from Singapore, Malaysia and Thailand, most ASEAN countries suffer from poor infrastructure quality. Poor infrastructure leads to high transportation costs, which is a key component of logistics expenses. For example, in 2012, the cost of a 40-foot dry container or a semi-trailer in Indonesia was US\$415 compared to only US\$178 in Singapore. Moreover, the cost of sending a 100-kilogram package from Jakarta to Tanjung Pinang (in Kepulauan Riau Province) is double the charges for sending the same package over a longer distance from Jakarta to Singapore.¹³

¹³ Titik Anas (2016). "Reforming Indonesia's Logistics Sector". Presentation made at Inception Workshop on *Services Sector Liberalisation: FDI Liberalization in ASEAN's Logistics Sector*, 23-24 June 2016 at ISEAS-Yusuf Ishak Institute, Singapore.

Figure 2: Infrastructure Competitiveness by Sector, 2015



Notes: Index 1 (extremely underdeveloped) to 7 (extensive and efficient) for the Quality of Roads, Railroad, Port and Air Transport Infrastructure.

Index 1 (extremely unreliable) to 7 (extremely reliable) for the Quality of Electricity

Data for Brunei is not available; Railroad infrastructure data is not available for Laos

The differences in human capital across ASEAN countries has been pointed out as another impediment in ASEAN’s efforts to integrate its logistics sector (Table 4).¹⁴ In Indonesia, Cambodia, Laos, Myanmar and Vietnam, shortage of trained professionals and the lack of on-the-job training in small-and-medium-scale enterprises (SMEs) reduce the competitiveness of the logistics industry, resulting in the stalling of liberalisation in some of these countries.

¹⁴ See Tongzon (2011), “Liberalisation of Logistics Services: The Case of ASEAN”, *International Journal of Logistics: Research and Applications*: 14 (1): 11-34.

Table 4. Human Capital Index across ASEAN Countries, 2016

Country	Rank	Score
Brunei	n.a.	n.a.
Cambodia	100	58.88
Indonesia	72	67.61
Laos	106	57.66
Malaysia	42	74.26
Myanmar	109	56.52
Philippines	49	71.75
Singapore	13	80.94
Thailand	48	71.86
Vietnam	68	68.39

Notes: n.a. – Not Available; The Human Capital Index is a proxy tool to gauge the extent of knowledge and skills embodied in individuals that enable them to create economic value in a country. It captures the complexity of education, employment and workforce dynamics. The ranking is among 130 countries. The Index assesses Learning and Employment outcomes on a scale of 0 (worst) to 100 (best).

Source: The Human Capital Report 2016, World Economic Forum

Implementation Capacities

The numerous sub-sectors and transportation modes imply that the governance of this sector cuts across many ministries and agencies, thereby making coherent policy formulation and implementation difficult. For any one logistics service, such as courier service, there are at least 4-5 government agencies responsible for policy development – the Ministry of Trade, small and medium enterprises (SME) promotion, foreign investment board, customs and others. Most ASEAN member countries find it difficult to coordinate policy implementation. There is also inadequate data in most member countries on the number of players, market size, industrial structure, foreign investment flows, trade performance and employment generation as well as the costs for moving goods from one point to another.

CONCLUSION AND POLICY RECOMMENDATIONS

The need to reduce trade costs and facilitate trade within ASEAN and the world at large argues for a continuation of ASEAN's efforts to liberalize and facilitate logistics integration. Much still needs to be done, as can be seen from the present state of implementation of the RILS. It is not surprising that the newly launched AEC 2025 vision continues to call for transport cooperation in terms of greater connectivity, efficiency, integration, safety and sustainability.¹⁵ Similarly, the new Kuala Lumpur Transport Strategic Plan (ASEAN Transport Strategic Plan: 2016 -2025) and Master Plan on ASEAN Connectivity 2025, continues to support transportation integration in air, land, maritime, including sustainable transport, and transport facilitation.

¹⁵ See ASEAN Secretariat 2015 b, *ASEAN Economic Community Blueprint 2025*.

<http://www.asean.org/storage/images/2015/November/aec-page/AEC-Blueprint-2025-FINAL.pdf>, accessed 1 September 2016.

Since in ASEAN there is a shift from monitoring based on mere compliance to an evaluation of outcomes and impact, better data in the logistics sector is critical. The present data banks in most ASEAN member countries are not centralized, and there is little sustained effort to measure logistics time and actual costs over time, which is precisely what is needed to evaluate outcomes and efforts. Methods used to measure are also not harmonised across the ten ASEAN member countries, which makes comparisons impossible.

Investments are needed for upgrading infrastructure quality, especially in member countries where the quality is still very weak. It is important to explore alternative financing options that have emerged over the last few years. Additionally, infrastructure projects need to be studied for viability.

As for institutions, what is most needed is an action plan for the AEC 2025 vision on good governance. Finally, coordinated implementation is required in each member country besides investments in financial and human resources. These internal efforts will enhance the competitiveness of each member country and with it, their commitment to logistics integration.

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